

ON CHRONIC SYMMETRICAL ENLARGEMENT OF THE
SALIVARY AND LACHRYMAL GLANDS.

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IN the second edition of my *Text-book of Medicine*, issued in 1895, under the heading of "Chronic Parotitis" I mention the case of a young girl, aged thirteen years, then under my care, "who has had for nearly a year enlargement of all the salivary glands, the lachrymal glands, the buccal mucous glands, and the spleen." The case interested me a great deal, and I searched in the literature at my disposal without finding any condition exactly like it. I had overlooked the fact that Mikulicz,¹ in 1892, had described the condition as a characterized form of chronic disease previously unrecognized. His patient, a man, aged forty-seven years, for seven months had symmetrical enlargement of the lachrymal glands, and subsequently of all the salivary glands.

Quite recently Kümmel² has met with a series of cases, and has collected one or two which had been previously described in the literature. His first case, a man, aged thirty-three years, had swelling of the salivary and both lachrymal glands in association with chronic hypertrophic rhinitis and asthma. He was cured by arsenic. The second case was a man, aged twenty-five years, who had had for two years slight swelling of all the salivary and lachrymal glands. The third case was a man, aged twenty-eight years, who had enlargement of all the salivary glands, particularly of the right parotid. The buccal and lachrymal glands were not enlarged. The fourth case, a woman, aged twenty-seven years, had swelling of both parotids and submaxillaries of two years' duration. The lachrymal glands were not involved. She had also a dry mouth. Both of these cases followed influenza. The fifth case, a man, aged forty-seven years, had swelling of both parotids only, of some years' duration. The sixth case was a woman, aged twenty-three years, in whom the submaxillary glands were swollen for six months. The other cases in the literature were the one of Mikulicz, already spoken of; one of Tietze, a male, aged thirty-six years, who for ten years had swelling of the parotid glands, and for four years swelling of the lachrymal glands. The ninth case was reported by Hallenhoff: a girl, aged twelve years, had for four months enlargement of the lachrymal, parotid, and submaxillary glands. Very full abstracts of these cases are given in Kümmel's paper.

¹ Bruns' *Beiträge* (Billroth's *Festschrift*, 1892).

² *Mittheilungen aus dem Grenzgebieten der Medizin und Chirurgie*, Bd. II., 1897.

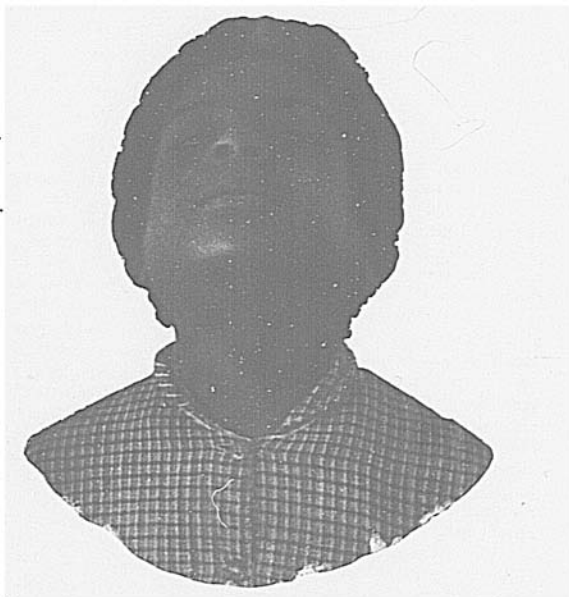
28. OSLER: SALIVARY AND LACHRYMAL GLANDS.

The history of the case which has been under my observation is as follows:

For more than a year enlargement of the lachrymal, salivary, and buccal mucous glands; enlargement of the spleen; syphilitic rhinitis; tuberculosis of the pleura and lungs; death. Hannah W., aged eleven years, colored, was admitted March 30, 1894, complaining of swollen glands in the neck.

Family History.—Father living, but delicate; mother died of typhoid fever. One sister has had convulsions. She has two brothers and several sisters, all of whom are healthy.

Personal History.—It is difficult to get any satisfactory account from her or her relatives. She says she has always been very well. Two years ago she had chills and fever for a month.



Present Illness.—Six weeks ago she began to feel dull and heavy, and the woman with whom she lived noticed that her face and neck were a little swollen. She did not complain of any pain. At the same time she had slight sores in the mouth and a discharge from the nose.

I saw her on March 31st, and dictated the following note: The child is well nourished, and has a good color; the tongue is clean. The eyes

are a little prominent. A remarkable feature is the symmetrical enlargement of both parotid glands, which stand out very prominently and tilt up the lobes of the ears. To the touch they are painless, and have a firm, board-like hardness. The outlines and lobulations of the glands can be felt with the greatest distinctness. The orifices of the ducts are a little swollen and firm, and a little mucus can be pressed out. Both submaxillary glands are enlarged and firm and hard. The sublingual glands can also be seen as a prominent nodular mass beneath the skin. The child's eyes are naturally prominent, but what adds strikingly to this feature is an enlargement of the lachrymal glands, causing marked bulging just above the outer canthus of each eye. They can be readily felt, and the lobulations are quite distinct. Just within the lower lip there is a small group of enlarged mucous glands. Just beyond the angle of the mouth on either side there are groups of the buccal glands, ten or twelve in number, greatly enlarged, the size of small peas. No other of the buccal glands are enlarged. The tonsils are moderately swollen. The accompanying figure, from a photograph, shows well the enlargement of the salivary glands, but not that of the lachrymal.

At the time of her admission there was no discharge from the nose. There were no signs of interstitial keratitis, and the upper central incisor teeth were well formed. There was slight general enlargement of the lymphatic glands over the body, particularly of those in the posterior cervical triangles. The spleen was enlarged; the edge could be easily felt beneath the costal border, and on deep inspiration the notch could be felt. The liver was not enlarged. The urine was of a natural yellow color, acid reaction, specific gravity 1025, and contained no albumin. The child remained under observation for more than a year. Cultures made from the mucus squeezed from the parotid ducts were negative.

Throughout the summer of 1894 the condition of the glands remained about the same. In June, before I went for my vacation, I noted that "the glands are still large and hard, without any special change." The spleen was perhaps a little smaller.

On October 1st I made the following note: "The right parotid gland is now smaller than the left. The right submaxillary and right sublingual glands are somewhat larger than they were in June. The lymph glands in the posterior cervical triangle have increased in size. The lachrymal glands have become somewhat smaller. The spleen is still to be felt nearly two fingers' breadth below the costal margin. The enlargement of the buccal glands persists." Several careful examinations of the blood were made throughout the spring and summer. The highest count of leucocytes was 10,300 per c.c. There was never any anæmia; the red blood-corpuscles were usually above normal.

In October and November she had a good deal of swelling of the nose, with elevation of the bridge, and Dr. Warfield reported that there was a good deal of thickening of the cartilaginous septum.

Throughout January and February there was distinct ulceration, which Dr. Warfield regarded as syphilitic, and she was ordered the iodide of potassium and mercurial inunctions.

In March, 1895, the right lachrymal gland became very much reduced in size, and was hardly perceptible. The left remained as large as previously. On March 27th she had a slight aphthous sore-throat, which was followed by an increase in the enlargement of the salivary glands, particularly of the right parotid and its extension on the cheek.

On April 6, 1895, she began to be feverish, and had pain in the right side of the chest, due to an attack of acute pleurisy with effusion. She had irregular fever through April and May. She gradually improved, and it was noticed throughout May and June that the swelling of the salivary and lachrymal glands had gradually reduced, and on July 19th it was noted that the parotid glands were no longer enlarged. The swelling of the submaxillary and sublingual glands had also disappeared, and the buccal glands were no longer to be seen.

On my return in September, 1895, I noted that there was a complete disappearance of the enlarged glands, and the spleen could only just be felt on the deepest inspiration.

The subsequent history of this case may be briefly referred to. She was readmitted to the hospital April 18, 1897, with signs of chronic pulmonary tuberculosis, with cavities at the right base. She died in July, 1897.

Dr. Livingcod, who performed the autopsy, tells me that the lachrymal glands were represented by fibrous structure, and there was at the time of the autopsy no trace of any enlargement of the salivary glands.

When this case first came under observation I thought that possibly it was associated with an inherited syphilis, and this seemed to be borne out by the subsequent development of a rhinitis, regarded by Dr. Warfield as syphilitic. This opinion appeared to be borne out by the gradual disappearance of the swellings, slowly, it is true, under the use of mercury and the iodide of potassium. It is interesting to note that swelling of one or both parotids may occur in secondary syphilis, an instance of which was at that time under observation in a student. Enlargement of the spleen, as in the case here reported, is not mentioned in any of the other cases. Subsequently the question arose as to the possibility of a tuberculous affection of the glands, an idea not confirmed by the subsequent history.

Both Mikulicz and Kümmel regard the disease as a chronic infection of as yet unknown origin. The enlargement of the glands may persist for months or years; causes no general disturbance; is painless. The condition occurs, as a rule, in persons at the middle period of life. Kümmel has made a careful histological study of the enlarged glands, and finds a complete substitution of the normal tissue by leucocytes. He suggests the name *achroöcytosis*, indicating a replacement by colorless corpuscles of the glandular elements.

The condition, though not serious, is unsightly, and on this account troublesome. Arsenic seems to have been very beneficial in several cases, and should it fail, iodide of potassium should be used.